



Connecting to Cluster

Olivier Mattelaer

SSH: Concept clef

- SSH se connecte grace a deux fichiers:
 - La clef publique:
 - ◆ Installée a l'avance sur différentes machines.
 - La clef privée:
 - ◆ Est le moyen d'identification
 - ◆ Doit être gardée secrete
- Pour empêcher les accès indésirables, la clef est cryptée par une passphrase





Consortium des Équipements de Calcul Intensif

6 clusters, 10k cores, 1 login, 1 home directory

I want to...

[create an account](#)

You are about to request an account on the CÉCI clusters.

The first step is to enter your email address. You will receive an email with a link to an online form which you will have to fill and submit.

Once your request has been approved, you will receive proper information on how to access the CÉCI clusters.

[renew my account](#)

[join an existing project](#)

create an account

My email address:

Send



Noeud de calcul
(Certain avec GPU)



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(Certain avec GPU)



Front-End
interface utilisateur
manneback.cism.ucl.ac.be



Noeud de calcul
(Certain avec GPU)



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Home or your office





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Home or your office



FireWall



Noeud de calcul
(Certain avec GPU)

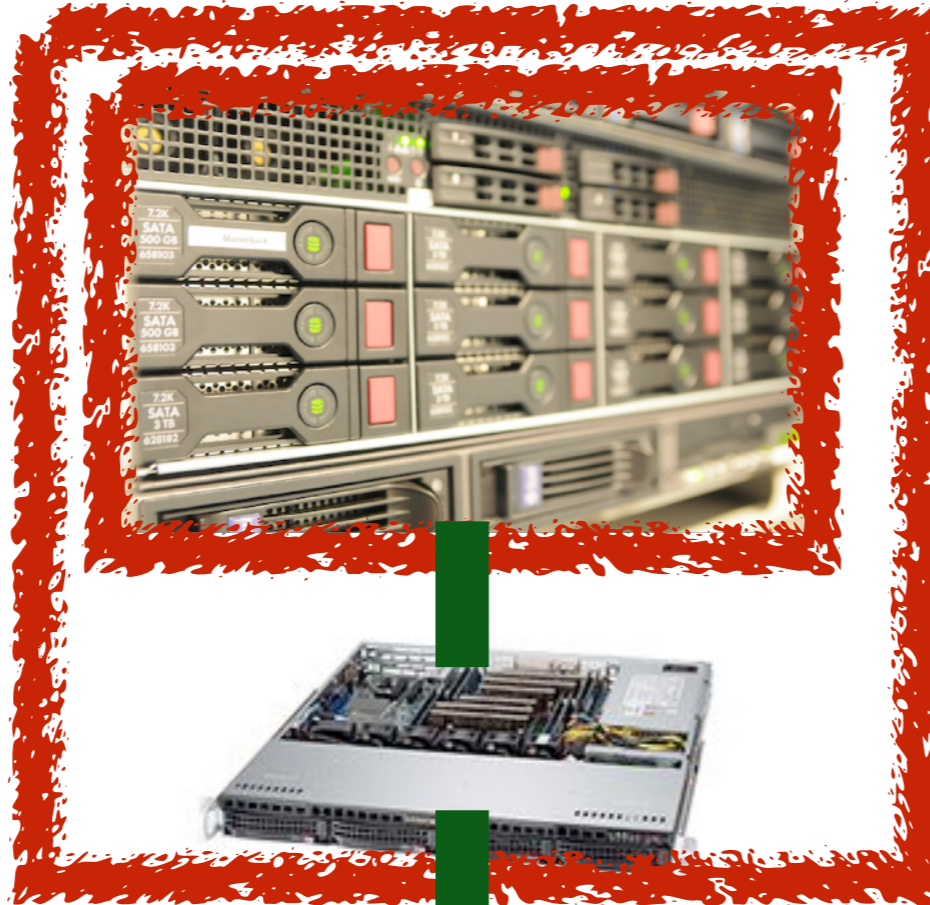
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Gateway
Point d'accès
gwceci.cism.ucl.ac.be



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SSH tools for windows

● Putty

- Only ssh connection
- No file transfer, **bad support of key**

● MobaXterm

- Very easy
- Both connection and file transfer

● VSCode

- Based on openssh, connection, file transfer and text edition, **no graphical server**

● OpenSSH on Windows (since 2018)

- Linux like experience
- Configure for free if using VSCode

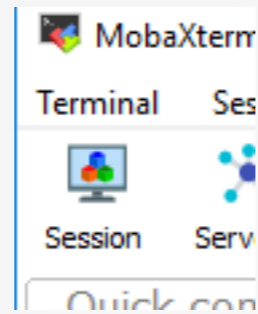
MobaXterm

- Live demo
- Demo also available on YouTube:
 - ➔ <https://youtu.be/o41r0mFaURU>
- Screen-shot available here

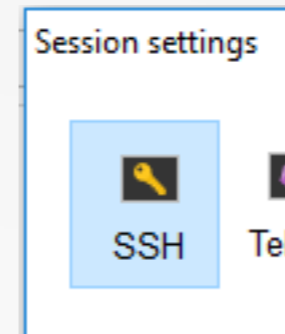
Configure mobaxterm

1) Save your id_rsa.ceci key file from your e-mail in a safe location

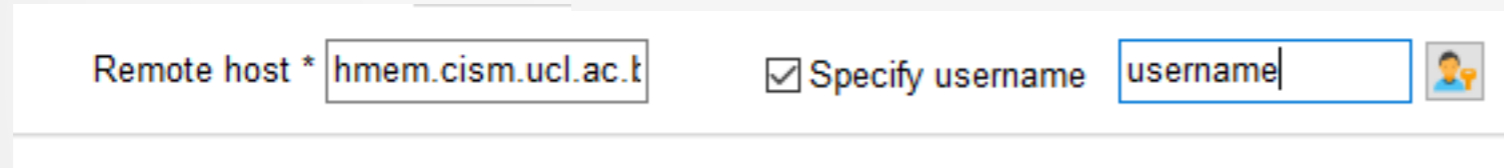
2) Click on Session



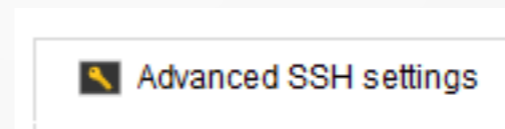
and SSH



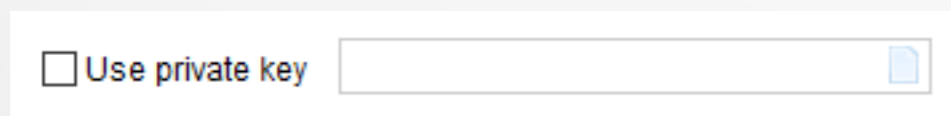
3) Add the Remote host



4) Select Advanced SSH Setting tab



5) Select use private key and browse for your id_rsa.ceci file



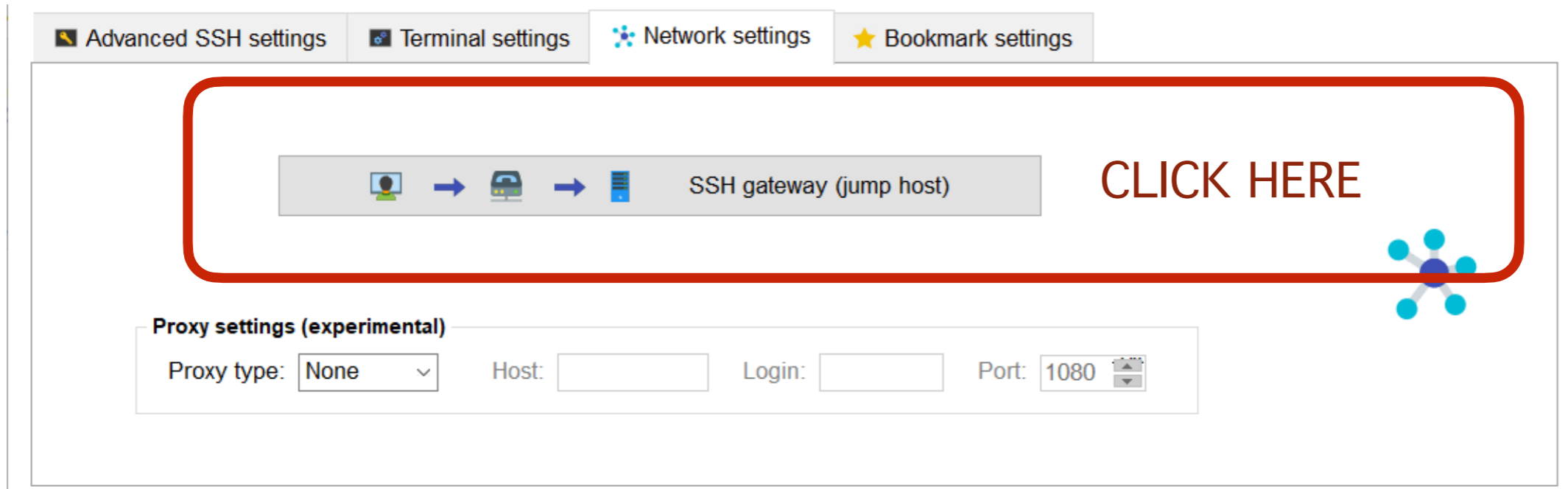
Depending of your version of mobaxterm/configuration it might ask you the passphrase already now

- ➔ Remote host options:
- ➔ maneback.cism.ucl.ac.be

Gateway configuration

- Need to go through a gateway!

→ Network settings

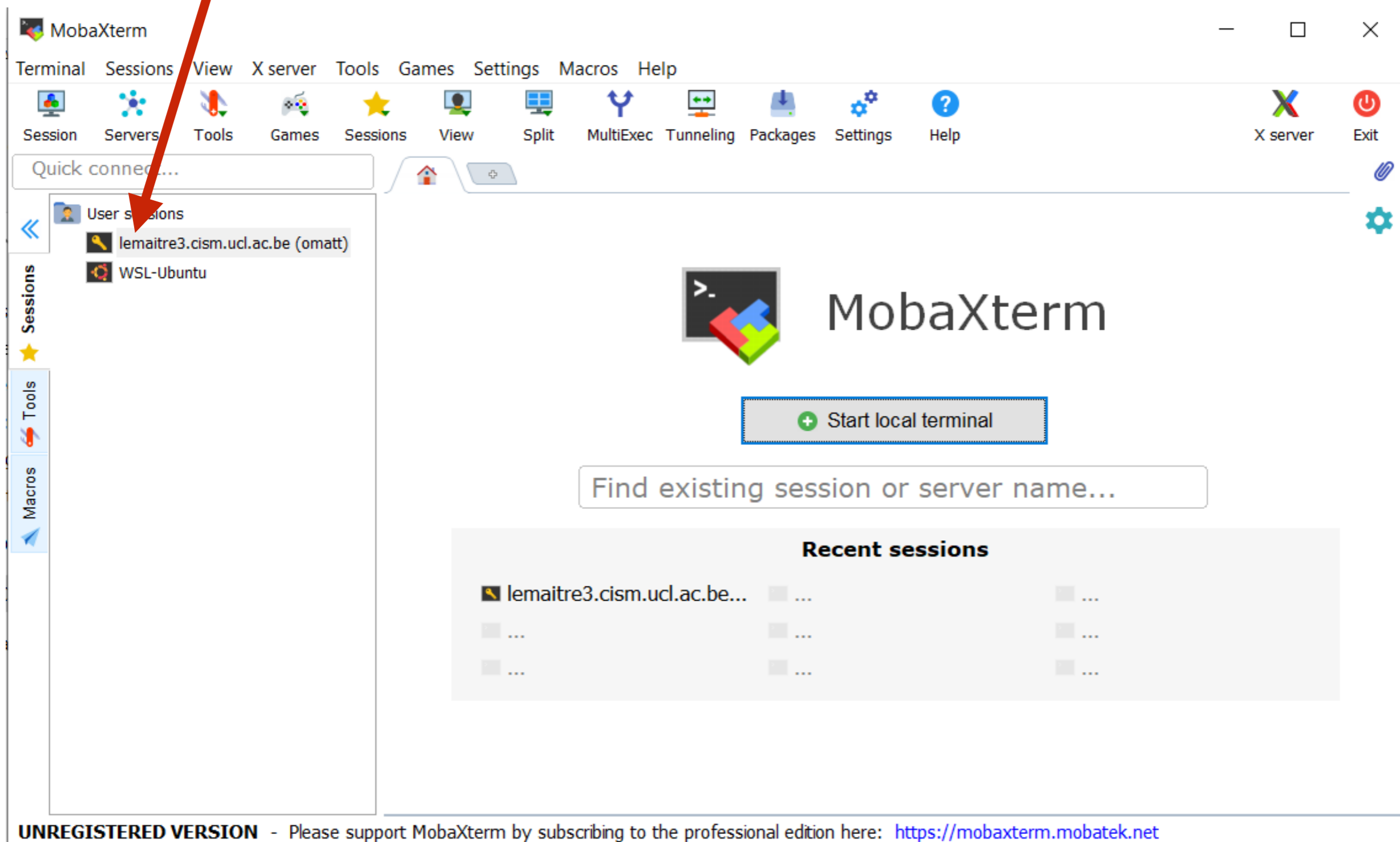


- Gateway to use:

- gwceci.cism.ucl.ac.be
- Provide the same key for identification

You can now connect to the cluster

CLICK HERE



SSH AGENT for MobaXterm

- Save your passphrase locally and let MobaXterm fill it for you!

MobaXterm Configuration

The screenshot shows the MobaXterm Configuration window with the SSH tab selected. The window has a title bar with a close button (X) and a toolbar with icons for General, Terminal, X11, SSH, Display, Toolbar, and Misc. The SSH settings are organized into three sections:

- SSH-browser settings:**
 - Enable graphical SSH-browser
 - Automatically switch to SSH-browser tab after login
 - Remote-monitoring (experimental)
 - Preserve file data during SSH browser transfer
- SSH settings:**
 - SSH keepalive
 - Display SSH banner
 - Validate host identity at first connection
 - Default login:
 - Use 2-factor authentication for SSH gateways
 - GSSAPI Kerberos
 - Domain:
 - GSSAPI library:
 - Defaults for commandline SSH: Compression X11-Forwarding Fix connection issues
- SSH agents:**
 - Use internal SSH agent "MobAgent"
 - Use external Pageant
 - Forward SSH agents
 - Load following keys at MobAgent startup:

A tooltip is visible over the SSH-browser settings, stating: "The SSH-browser is a graphical remote file browser which is displayed in the sidebar. It allows you to browse your remote server content using the secure SSH connection." Three red arrows point to the checked checkboxes for "SSH keepalive", "Use internal SSH agent 'MobAgent'", and "Forward SSH agents".